

**IN THE UNITED STATES DISTRICT COURT
FOR THE DISTRICT OF MASSACHUSETTS**

_____)	
SKYLINE SOFTWARE SYSTEMS, INC.,)	
)	
Plaintiff,)	
)	
v.)	CIVIL ACTION NO. 04-11129-DPW
)	
KEYHOLE, INC. and)	
GOOGLE, INC.,)	
Defendants.)	
_____)	

**PLAINTIFF SKYLINE SOFTWARE SYSTEMS, INC.'S MEMORANDUM
IN SUPPORT OF MOTION FOR PRELIMINARY INJUNCTION**

Table of Contents

I.	INTRODUCTION.....	1
II.	BACKGROUND	3
A.	Procedural Background	3
B.	Technical Background.....	6
1.	The Prior Art and the Need for Skyline’s Invention	6
2.	The Patented Technology	7
3.	The Accused Google Earth Products	10
III.	ARGUMENT.....	13
A.	The Preliminary Injunction Standard	13
B.	Skyline Is Entitled To A Preliminary Injunction.....	13
1.	Skyline Is Likely To Succeed On The Merits Of Its Infringement Claims.....	13
(a)	Defendants Infringe Claim 1 of the ‘189 Patent.....	14
(i)	“data blocks containing three-dimensional terrain” & “hierarchical structure”	14
(ii)	“renderer,” “coordinates in the terrain” & “indication of a respective resolution level”	17
(iii)	“first data block,” “data corresponding to the one or more coordinates” & “local memory”	19
iv)	“remote server,” “resolution level” & “communication link”	21
(b)	Defendants Infringe Claim 12 of the ‘189 Patent.....	22
(c)	The ‘189 Patent Is Valid.....	24
2.	Skyline Is Suffering And Will Continue To Suffer Irreparable Harm Absent An Injunction.	27
3.	The Balance Of Hardships Is Clearly In Skyline’s Favor.....	29
4.	The Public Has A Strong Interest In Enforcing Patent Rights.	29

. **No Bond Is Necessary.****30**

IV. CONCLUSION**31**

Table of Authorities

FEDERAL CASES

<i>Application of Bayer,</i> 568 F.2d 1357 (C.C.P.A. 1978)	25
<i>Atlas Power Co v. Ireco Co.,</i> 773 F.2d 1230 (Fed. Cir. 1985)	27
<i>Canon Computer Sys., Inc. v. Nu-Kote Int'l, Inc.,</i> 134 F.3d 1085 (Fed. Cir. 1998)	24
<i>Cybermedia, Inc. v. Symantec Corp.,</i> 19 F.Supp.2d 1070 (N. D. Cal. 1998).....	30
<i>Dana Corp. v. Am. Axle & Mfg., Inc.,</i> 279 F.3d 1372 (Fed. Cir. 2002)	24
<i>Freedom Wireless, Inc. v. Boston Communications Group, Inc.,</i> 390 F.Supp.2d 63 (D. Mass. 2005).....	25
<i>Glaxo Group Ltd. v. Apotex, Inc.,</i> 376 F.3d 1339 (Fed. Cir. 2004)	25
<i>Honeywell Int'l, Inc. v. Universal Avionics Sys. Corp.</i> --F.Supp.2d --, 2005 WL 2860001, *7 (D. Del. Nov. 1, 2005).....	27, 28, 29
<i>Hybritech, Inc. v. Abbott Labs.,</i> 849 F.2d 1446 (Fed. Cir. 1988)	13, 27, 28
<i>Invitrogen Corp. v. Biocrest Mfg., L.P.,</i> 327 F.3d 1364 (Fed. Cir. 2003)	15
<i>Markman v. Westview Instr., Inc.,</i> 52 F.3d 967 (Fed. Cir. 1995), <i>aff'd</i> , 517 U.S. 370 (1996)	13, 24
<i>McGinley v. Franklin Sports, Inc.,</i> 262 F.3d 1339 (Fed. Cir. 2001)	25
<i>National Steel Car, Ltd. v. Canadian Pacific Railway,</i> 357 F.3d 1319 (Fed. Cir. 2004)	13
<i>Northern Telecom, Inc. v. Datapoint Corp.,</i> 908 F.2d 931 (Fed. Cir. 1990)	25

<i>Oakley, Inc. v. Sunglass Hut International</i> , 316 F.3d 1331 (Fed. Cir. 2003)	28
<i>Purdue Pharma L.P. v. Boeringer Ingelheim Gmbh</i> , 237 F.3d 1359 (Fed. Cir. 2001)	26
<i>Rockwell Int'l Corp. v. United States</i> , 147 F.3d 1358 (Fed. Cir. 1998)	13
<i>Smith Int'l Inc. v. Hughes Tool Co.</i> , 718 F.2d 1573 (Fed. Cir. 1983)	27
<i>Smith & Nephew, Inc. v. Ethicon, Inc.</i> , 276 F.3d 1304 (Fed. Cir. 2001)	16
<i>Stiftung v. Renishaw PLC</i> , 945 F.2d 1173 (Fed. Cir. 1991)	15
<i>Vivid Technologies, Inc. v. American Science & Eng'g, Inc.</i> , 200 F.3d 795 (Fed. Cir. 1999)	16
<i>Woodland Trust v. Flowertree Nursery</i> , 148 F.3d 1368 (Fed. Cir. 1998)	26

FEDERAL STATUTES

35 U.S.C. §102(b).....	25
35 U.S.C. § 282.....	24

I. INTRODUCTION

Since acquiring Defendant Keyhole, Inc. (“Keyhole”) in October 2004,^{1/} Defendant Google, Inc. (“Google”) (collectively with Defendant Keyhole, “Defendants”) has embarked on a clear plan to saturate the relevant market with the infringing products at issue in this litigation, referred to collectively here as Google Earth.^{2/} These actions by a new multi-billion dollar entrant into this market, using Skyline’s patented technology, are causing Skyline immediate and irreparable harm. And this is precisely the intent of Google’s actions.

The first step in Google’s plan to dominate the three-dimensional (“3D”) mapping market after acquiring Keyhole was to slash the price of Keyhole’s low-end product by over 50%, reducing the cost from \$69.95 to \$29.95 per year.^{3/} Today, Google offers this product for just \$20 a year. Google then decided to allow customers to download a lower-end version of its 3D terrain visualization technology at no cost whatsoever, and dramatically reduced the yearly cost of Keyhole’s higher-end product from \$600 to \$400.^{4/} While offering these products at a dramatically reduced cost, and reaching and extending its already broad customer base, Google has eclipsed its competitors in this market.

Google has similarly used its substantial market power to dominate its competitors in the commercial market for terrain visualization software with its infringing Google Earth Enterprise

^{1/} Exhs. 1 (“Google Adds Mapping Technology” by Kevin Newcomb, Oct. 27, 2004) & 2 (“Google Unfolds 3D Mapping Acquisition” by Colin Haley and Susan Kuchinskas). All exhibits cited herein are attached to the Declaration of H. Joseph Hameline, Esq., submitted in support of this Motion.

^{2/} The accused Google Earth products include their Keyhole predecessors, such as products with Keyhole’s EarthStream technology, Keyhole 2 LT, Keyhole 2 PRO, Keyhole 2 EC, Keyhole 2 NV, Keyhole 2 FUSION LT, Keyhole 2 FUSION PRO, and Server, as well as Google Earth, Google Earth Plus, Google Earth Pro, and Google Earth Enterprise Solution (including Google Earth Fusion, Google Earth Server, and Google Earth Enterprise Client “EC”). Exhs 11 (http://earth.google.com/product_comparison.html) & 12 (<http://www.keyhole.com/body.php?h=products>).

^{3/} Exh. 1 (“Google Adds Mapping Technology” by Kevin Newcomb, Oct. 27, 2004) (“Google has reduced the price of an annual subscription to the consumer version, Keyhole 2 LT, from \$69.95 to \$29.95. It also offers a 7-day free trial.”).

^{4/} Declaration of Ronnie Yaron (“Yaron Decl.”), ¶¶ 9 & 10.

Solutions products. These infringing products, which compete directly with those offered by Skyline, sell for tens of thousands of dollars. Over the past months, Google has aggressively entered this high-end terrain visualization market. Given its stature and substantial resources, Google is making great and rapid strides in that direction, advertising its products to defense and commercial customers.^{5/} Consumers' growing familiarity with the free and/or low cost Google Earth products coupled with Google's market power has allowed Defendants to increasingly dominate both the personal and commercial markets with targeted tiers of its infringing product.

By all publicly documented accounts, Google's attempts to flood the market with its no-cost or low-cost infringing products are working.^{6/} In July 2005, Google Earth was the most popular software download on the web and, in November 2005, it ranked in the "Top 10 FREE Downloads," according to the *Evening Standard* and other sources.^{7/}

Importantly for purposes of this Motion, the effect of Defendants' efforts to dominate the market with its infringing Google Earth products is to exclude Plaintiff Skyline Software Systems, Inc. ("Skyline") -- the holder of the patent covering the key technology embodied in the Google Earth products -- from the relevant markets. Since acquiring Keyhole, Google has not only used its substantial financial muscle to drastically reduce the cost of the Google Earth products (a feat that a small business like Skyline cannot replicate), it has also thwarted competitors like Skyline from acquiring the necessary high-resolution 3D terrain data needed to sustain its business. In particular, Google has entered into an agreement with the premier supplier of very high resolution satellite imagery for 3D visualization applications.^{8/} As a result,

^{5/} Exh. 3 (<http://search.google.com/industries.html>).

^{6/} Exh. 16 (<http://earth.google.com/earth.html>).

^{7/} Exhs. 4 (http://www.findarticles.com/p/articles/mi_qn4153/is_20051107/ai_n15802062/print) & 5 (<http://www.google.com/intl/en/press/awards.html>) & 6 (http://www.chip.de/downloads/c1_downloads_13015193.html).

^{8/} Yaron Decl., ¶ 11.

Defendants have used Skyline's patented invention to preclude Skyline itself from being able to effectively practice and profit from the invention claimed in its own patent!

Relief is needed now, Google's actions are causing Skyline mounting and irreparable harm. Given their almost limitless resources compared to Skyline, Defendants' efforts to saturate the market with their infringing products will be dramatic, in several respects: market penetration, price erosion and an inability of Skyline to compete. First, if Defendants' efforts continue unabated, Skyline essentially will be locked out of an entire market -- a market in which it is the innovator and patent holder, due to Defendants' infringement. Skyline will not only suffer economic harm, if Defendants' rampant infringement and related business practices continue, Skyline may go out of business altogether. Second, if Defendants are allowed to continue selling infringing products at no cost (or at a drastically reduced price), once price expectations are set in a marketplace, it will be difficult if not impossible for Skyline to reestablish customer expectations at a sustainable price point.

Skyline requires immediate preliminary injunctive relief to enjoin Defendants' use of Skyline's patented 3D terrain visualization technology in their Google Earth products.

II. BACKGROUND

A. Procedural Background

Since its founding in Israel in 1997, Plaintiff Skyline's predecessor, Skyline Software Systems, Ltd., was a technology innovator in the field of three-dimensional (3D) terrain visualization software and services. Yaron Decl., ¶ 2. Based on its extensive research and development efforts, Skyline applied for a U.S. patent covering its technological advancements in this field on February 26, 1999. *Id.*, ¶ 3. On December 17, 2002, United States Patent No. 6,496,189 ("the '189 Patent"), entitled "Remote Landscape Display and Pilot Training," was

duly and legally issued to Skyline Software Systems, Ltd. for an invention relating to digital imaging devices. Id. The ‘189 Patent was assigned to Plaintiff in October 2003. Id.

Since pioneering the 3D visualization systems market in the late-1990s, Skyline Software Systems, Ltd. developed its line of “Terra” software products, including Skyline’s Terra Gate, Terra Builder, and Terra Explorer Pro products, which remain on sale today. Id., ¶ 4. In 2001, In-Q-Tel, a private investment and technology licensing arm of the United States Central Intelligence Agency, expressed a strong interest in investing in Skyline’s technology to be used for defense applications. Id. In-Q-Tel, however, could not invest U.S.-defense dollars in an Israeli-controlled company under its governing rules. Id. Given this substantial loss of potential business, as well as pressure from other U.S. governmental organizations, Skyline decided to move its operations to the United States in August 2003. Id., ¶ 5. Since incorporating in the United States, Skyline’s business, and its product offerings, have continued to grow.

Defendant Keyhole, Inc., a digital mapping company, was founded in 2001, several years after Skyline began its 3D terrain visualization business. Keyhole received initial funding from Sony Broadband and later received funding from In-Q-Tel after In-Q-Tel declined to invest in Skyline due to its status as an Israeli-based company. Id., ¶ 4. In-Q-Tel gave Keyhole a mandate to replicate Skyline’s technology, which was not available at that time from any U.S.-based company. Id. Like Skyline, Keyhole offered both low-end and high-end 3D mapping products. Id., ¶¶ 7 & 8. It offered these products at similar prices to Skyline’s. Id.; Exh. 2 at 3.

In 2004, Skyline notified Keyhole of its infringement contentions. Keyhole never provided a substantive response as to how it did not infringe the ‘189 Patent. Declaration of H. Joseph Hameline, Esq. (“Hameline Decl.”), ¶ 2. On May 28, 2004, Skyline initiated this lawsuit to remedy Keyhole’s direct and induced infringement of the ‘189 Patent. See Docket No. 1. Within months of filing the Complaint, Google, a multi-billion dollar Internet behemoth, purchased Keyhole.

Google's first order of business was to immediately announce a drastic price cut for Keyhole's infringing 2 LT product, dropping the price from \$69.95 to \$29.95 per year. Exh. 1. Google also announced that it would provide potential customers with a seven-day free trial of the software. Exh. 2 at 2. Google later decided to give a version of Keyhole's 2 LT product away to users free of charge. Exh. 11. It further reduced the yearly cost of the business subscription version of its higher-end technology from \$600 to \$400. Yaron Decl., ¶ 9; Exhs. 1 & 2. As Keyhole's Chief Executive Officer noted at the time of Google's acquisition: "What excited us about the deal with Google was the fact that the product we developed could be made available to millions of users. *Cutting the price would reach a wider audience.*" Exh. 8 (NewsFactor Business Report, "Google Buys Digital Mapping Company," by Robin Arnfield, Oct. 27, 2004 at 3) (emphasis added). And reach a wider audience it has. In July 2005, Google Earth was the most popular software download and, in November 2005, it ranked in the "Top 10 FREE Downloads," according to the *Evening Standard*. Exhs. 5 (<http://www.google.com/intl/en/press/awards.html>) & 6 (http://www.chip.de/downloads/c1_downloads_13015193.html)

With its market might, Google has also been able to leverage favorable relationships with commercial providers of high resolution aerial and satellite imagery. The premier supplier of the very high resolution image data used in this application is DigitalGlobe. Yaron Decl., ¶ 11. DigitalGlobe is the only acceptable provider of very high resolution commercial satellite data. Id. Google Earth has recently become an authorized reseller of DigitalGlobe data in this market. In so doing, Google has effectively cut off the supply of this 3D data to Skyline -- the innovator in the field and the holder of the patent-in-suit covering this technology.

Based on this Court's Scheduling Order, in the year and a half since Skyline initiated this lawsuit, no substantive discovery has been conducted. Hameline Decl., ¶ 3. Defendants have not provided any discovery to Skyline relating to the design and operation of their accused

products. Id. In fact, Defendants have never provided any statement to Skyline as to how its accused products do not infringe the ‘189 Patent. Id. The parties now await the Court’s claim construction ruling following the Markman hearing conducted on April 27, 2005. The Court has stayed discovery pending its claim construction ruling. Meanwhile, Google enjoys widespread success in bringing its infringing Google Earth products (based on Skyline’s patented technology) to the market and in its efforts to develop an overwhelming hold on that market.

B. Technical Background

1. The Prior Art and the Need for Skyline’s Invention

Skyline’s patented invention solved several problems present in prior art computerized systems for visualizing 3D terrain. A very large amount of data is required to render (or display) 3D images, particularly if the image is of 3D terrain and the user wishes to travel through and zoom in to observe higher resolution images of that terrain area. Declaration of Terry Keating, Ph.D. (“Keating Decl.”), ¶ 6; Yaron Decl. ¶ 12. Most home computer systems lack sufficient memory to allow a user to store viewed 3D images, or to stream the amount of data necessary to view such images through diverse terrain at various levels of resolution. Exh. 7 (‘189 Patent, col. 1, lns. 49-51). In an effort to solve these problems, certain prior art suggested that those wishing to view such 3D terrain images store the data on a DVD or CD-ROM disks and provide image data to a local client computer. Id., col. 1, lns. 54-55. This approach, however, required the user to acquire a disk (or disks) for each terrain area that he or she wished to view. The image data contained on the disk (or disks) also frequently required updates to reflect changes in the terrain. Id., col. 1, lns. 59-61. In addition, users frequently lost or damaged these disks.^{9/}

^{9/} A standard data storage compact disk (CD-ROM) holds about 650 Megabytes of data and is typically produced and sold in batches of identical units that are not customized to a particular customer’s request.

2. The Patented Technology

Skyline overcame these problems through its extensive research and development efforts. Yaron Decl., ¶ 3. The '189 Patent, issued on December 17, 2002, relates to computerized rendering and visualization of 3D terrain images, such as 3D Earth terrain images, and related data associated with the images. Skyline's patented invention provides a system and method for efficiently providing data describing 3D terrain from a server to a client over a network, and rendering a more seamless view of 3D terrain to a user of the client machine. Keating Decl., ¶ 7.

As described in the '189 Patent, the data representing 3D terrain, which may cover, for example, portions of the Earth, other planets or atomic structures and objects (see Exh. 7, col. 16, lns. 9-24), is divided into data blocks.^{10/} Id., FIG. 2. Terrain data includes topographical data, such as elevation or altitude data (see id., col. 2, lns. 11-14), and/or image data from aerial or satellite photography (see id., col. 8, lns. 32-37). The data blocks may also include additional data objects, such as labels, lines or 3D objects (including map symbols, roads, buildings, and proposed structures). Keating Decl., ¶ 9; Exh. 7 ('189 Patent, col. 8, lns. 37-58; col. 10, lns. 6-14; col. 13, lns. 58-60). The data is organized hierarchically by dividing the data into a grid or blocks, which are assigned the highest resolution level. Keating Decl., ¶ 9; Exh. 7 ('189 Patent, col. 9, lns. 55-57). Blocks of lower resolution may be prepared by eliminating data from an original block according to one or more embodiments of the invention or similar methods. Id., col. 9, lns. 55-61. The various resolution levels of the data blocks then correspond to a perceived viewing distance (or altitude) above the surface of the visualized terrain. Id., col. 8, lns. 61-67. The blocks with the highest resolution level have the most amount of detail per unit area. Id., col. 3, lns. 6-9. The blocks are referenced using coordinates, such as x, y, (longitude, latitude), height and/or resolution level. Id., col. 9, lns. 35-39.

When the user requests to view a specific area and viewpoint in the terrain, the server computer provides the client computer with data blocks for that terrain area. Keating Decl., ¶ 9; Exh. 7 ('189 Patent, col. 3, lns. 16-20). If the user previously downloaded blocks for that area, they are retrieved from local memory and may be used to display the requested terrain. Id., col. 11, lns. 62-65. Use of data stored in local memory can be retrieved quickly to enable the user to view low resolution terrain images without delay. Id., col. 3, lns. 58-60. If the block is not available in local memory at the desired resolution, a block of the requested area with a relatively low level of resolution is quickly downloaded. Data blocks with successively higher resolution levels are then downloaded, thereby sharpening the image rendered at the client, until the block matching the requested location and desired resolution has been downloaded. Keating Decl., ¶ 9; Exh. 7 ("189 Patent, col. 3, lns. 20-23; col. 14, lns. 47-54). As the client "zooms" in to get a closer view of the terrain, higher resolution data blocks are downloaded until the requested resolution level or maximal resolution level of the available data is provided and displayed. Keating Decl., ¶ 9; Exh. 7 ('189 Patent, col. 14, lns. 40-53). See also Claims 1 & 12.

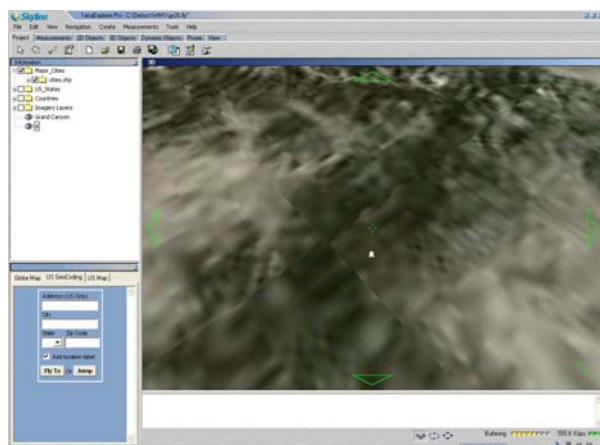
Skyline's invention allows the client to simulate moving through the terrain without waiting for all of the desired higher resolution data blocks. This avoids the undesirable situation where the user is forced to look at a blank or frozen computer screen until the requested resolution data blocks for some terrain are all downloaded and displayed. Skyline's invention allows the higher resolution images to be streamed to the local client computer, while the client's user views relevant lower resolution data blocks containing less data. Keating Decl., ¶ 9; Exh. 7 ('189 Patent, col. 1, lns. 33-39; col. 8, lns. 1-6). Areas in the terrain that are peripheral, or at a greater "distance" from the center of view, may remain at a lower resolution, thereby minimizing

^{10/} The following description of the '189 Patent refers generally to the preferred embodiments described in the Patent as a concise means of explaining the methods and apparatus of the invention.

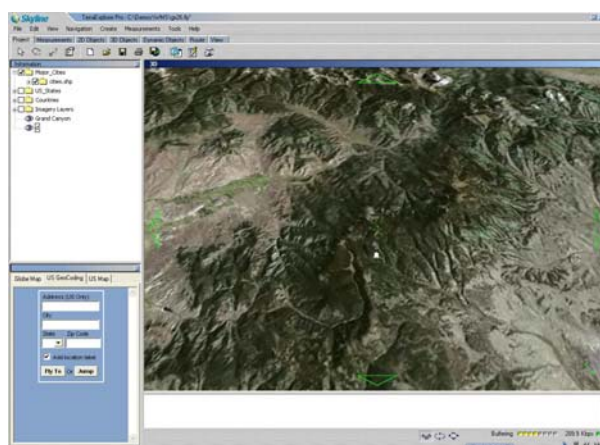
the amount of data that must be streamed for these “distant” areas. Images in the focus of the viewer are provided at a higher resolution. Id., col. 13, lns. 62-67; col. 14, lns. 1-9 (FIG. 7); col. 14, lns. 46-54. Thus, the user can travel seamlessly to adjacent or peripheral areas of lower resolution while higher resolution data blocks for those areas are provided. As described in the ‘189 Patent, the user “sees an image at substantially all times and is not prevented from moving the viewpoint while additional data is being sent from the server.” Id., col. 4, lns. 5-9.

In use, as embodied in various Skyline software products, the invention is presented to a user through a graphical user interface of a computer. As can be seen in the sequence of screen shots below (“Frame 1” and “Frame 4”), the Skyline product running at a client computer receives and displays a lower resolution data block (e.g., in Frame 1), the images contained therein appear blurry. See also Exh. 9 for a full page copy of these frames. The lower resolution data blocks are then supplemented by sequentially higher resolution data blocks streamed from a server to the client until a higher resolution image of 3D terrain is displayed (e.g., in Frame 4).

FRAME 1 (Skyline)



FRAME 4 (Skyline)



As reflected in Exhibit 9 and the two screen shot frames above, the user can select a position or pick coordinates in the terrain (for example, an address), which corresponds to the region of the 3D terrain that is rendered in the image area of the screen. The “Buffering” indicator and

“Streaming” status bar, located in the lower right hand corner of each screen shot, shows the progress of streaming the data blocks from a server to the client. The process of streaming the data blocks is also illustrated by the kilobytes per second (or “Kbps”) display near the lower right corner of the screen shots. Id. The “coordinates in the terrain” (for example, the “address,” “city,” or “state”) can be inputted by the user in the text box labeled “GlobeMap” located in the bottom left hand corner of each screen shot. Id.

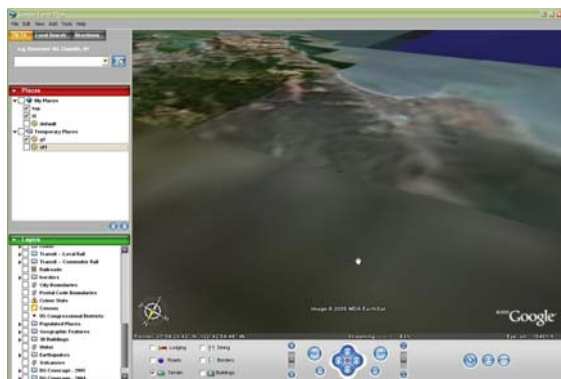
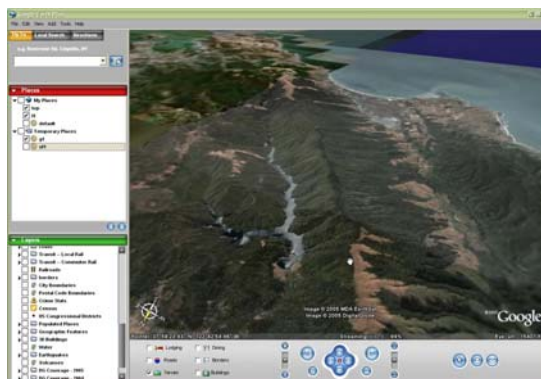
3. The Accused Google Earth Products

Defendants’ infringing Google Earth products work in the same manner as illustrated above and as claimed in the ‘189 Patent. Like Skyline’s patented invention, Defendants’ infringing Google Earth products provide 3D graphics, mapping and visualization of global terrain locations, via the Internet. In Defendants’ products, a Map Controls area allows the display of 3D terrain data configured from data blocks, described by Defendants as “Terabytes” of aerial and satellite images, using OpenGL or Direct X to provide a client computer with 3D terrain rendering graphics software. See, e.g., Exh. 14 (“Keyhole 2 LT/NV Quick Start Guide”) at 7. By entering a set of coordinates in the terrain, such as an address, an intersection, or latitude and longitude coordinates, a specific map of a terrain area is presented to a user at the client computer. Id.; Keating Decl., ¶ 8. The Google Earth product generates or renders images of the 3D terrain containing the information available from the server to the client, which can include features such as buildings, road signs, annotations, etc. Exh. 21 at 5 (shown below).



As in the claimed invention, the Google Earth 3D terrain map can be manipulated by clicking a position on the map or by entering particular coordinates for an area, and a data block for that area is provided to the client in a hierarchical fashion. Exh. 10. Greater or less detail is provided to the client based on the coordinates in the terrain requested by the client renderer. A hierarchical set of successive resolutions of data blocks in the terrain is provided for geographic locations denoted by the coordinates in the terrain, with layers of information added to enhance the data describing the terrains. Id. The Google Earth products also store data retrieved from the network in a local memory at the client, from which the data blocks having successive resolution levels are provided to a renderer on the client computer. If the stored data block is not of sufficient resolution, additional data blocks are retrieved from a remote server at a higher resolution. Exh. 13 at 17 & 78. Thus, the Google Earth products take advantage of the patented improvements over the prior art, as described and claimed in the '189 Patent.

As shown in the screen shots below, the infringing Google Earth products running at a client computer receive and render a coarse (or lower resolution) data block (e.g., in Frame 1) followed by sequentially higher resolution data blocks streamed from a server to the client (e.g., in Frame 4) until a finer (or higher resolution) image of 3D terrain is rendered.

FRAME 1 (Google)**FRAME 4 (Google)**

The user selects a location in the 3D terrain, and also selects a level of detail desired for viewing the location in the terrain. The server then downloads to the client successively increasing resolution data blocks at successively higher resolutions. Frame 1 depicts the lower resolution level images, whereas Frame 4 is displayed at the resolution desired by the user, as indicated by the zoom level. See also Exh. 10 for a full page copy of these frames. This process replicates the patented Skyline process.

The infringing Google Earth products also allow the user to enter coordinates in the terrain, such as latitude and longitude, in the lower left corner of the screen, in white numbers following the word “Pointer,” which signifies the computer pointer interface controlled by the user. Id. The screen shots above also illustrate how successively higher resolution data blocks are streamed to the client, as the word “Streaming” and a streaming status bar and percentage value is displayed at the lower middle portion of the image. Id.; Keating Decl., ¶ 13. In addition, the level of detail or degree of zooming accomplished is determined by the apparent altitude from which the image appears, as indicated at the lower right corner of the image by the words “Eye alt” and the number of feet (e.g., “15401 ft”). Id. The user of the Google Earth product can control the parameters using the graphical user interface controls, such as are visible in the screen shots below the terrain image screen area. Id. The user can select other controls

and settings from the areas above and to the left of the image screen area. Id. Finally, the annotations near the bottom of each image (“Image © 2005 DigitalGlobe”) make clear that the image data is provided to Defendants by or through DigitalGlobe. Id.; see also Exh. 14 at 7.

III. ARGUMENT

A. The Preliminary Injunction Standard

Skyline is entitled to a preliminary injunction because: (1) it has a reasonable likelihood that it will succeed on the merits of its patent infringement claims; (2) Skyline is suffering and will continue to suffer irreparable harm absent an injunction; (3) the balance of hardships tips decidedly in Skyline's favor; and (4) implementation of an injunction would favorable impact on the public interest. National Steel Car, Ltd. v. Canadian Pacific Railway, 357 F.3d 1319, 1325 (Fed. Cir. 2004); Hybritech, Inc. v. Abbott Labs., 849 F.2d 1446, 1451 (Fed. Cir. 1988). “These factors, taken individually, are not dispositive; rather, the district court must weight and measure each factor against the other factors and against the form and magnitude of the relief requested.” Hybritech, 849 F.2d at 1451.

B. Skyline Is Entitled To A Preliminary Injunction.

1. Skyline Is Likely To Succeed On The Merits Of Its Infringement Claims.

To meet the first factor of the preliminary injunction test, Skyline must show a reasonable likelihood of proving that at least one claim of its patent is infringed, and is not invalid. Hybritech, 849 F.2d at 1451. Determining whether a patent has been infringed is a two-step process: first, the Court must determine the meaning of the patent claims at issue; second, it must apply those claims, as construed, to the article accused of infringement to determine whether the elements of the claim can be found in the article in question. See Markman v. Westview Instr., Inc., 52 F.3d 967, 976 (Fed. Cir. 1995), aff’d, 517 U.S. 370 (1996).

The parties have extensively briefed the claim construction issues in this case and await the Court's Markman ruling. Nonetheless, given Defendants' aggressive activities in the relevant marketplace during the pendency of the claim construction ruling, Skyline has suffered and will continue to suffer irreparable harm. Given Defendants' own admissions in their product literature, descriptions and manuals, it is clear that Skyline is likely to succeed on the merits of its patent infringement claims based upon any reasonable claim construction.

(a) Defendants Infringe Claim 1 of the '189 Patent.

Claim 1 of the '189 Patent is directed to a method for providing data blocks describing three-dimensional terrain to a renderer. Specifically, Claim 1 provides:

1. A method of providing *data blocks describing three-dimensional terrain* to a *renderer*, the *data blocks* belonging to a *hierarchical structure* which includes blocks at a plurality of different *resolution levels*, the method comprising:

receiving from the *renderer* one or more *coordinates in the terrain* along with *indication of a respective resolution level*;

providing the *renderer* with a *first data block* which includes *data corresponding to the one or more coordinates*, from a *local memory*;

downloading from a *remote server* one or more additional *data blocks* at a *resolution level* higher than the *resolution level* of the first block which include *data corresponding to the one or more coordinates* if the provided block from the *local memory* is not at the *indicated resolution level*.

Exh. 7 (col. 16, lns. 28-43) (emphasis added).

(i) “data blocks containing three-dimensional terrain” & “hierarchical structure”

The accused Google Earth products provide a method of supplying data blocks describing 3D terrain, such as the Earth's surface, to a renderer on the client computer in a hierarchical fashion, whereby the data blocks contain a plurality of different resolution levels. Claim 1 requires “*data blocks describing three-dimensional terrain*,” where the data blocks belong to a hierarchical structure that includes blocks at “plurality of different resolution levels.” As used in the '189 Patent, a “*data block*” is a quantity, set or amount of information or data representing a

portion of the terrain. See, e.g., id. (col. 8, lns. 18-21). Further, the '189 Patent uses the term "*terrain*" to mean the physical features of an area, object or material, which includes geographic and/or elevation attributes and may include other features, such as color attributes and objects. Id., col. 5, lns. 37-38; col. 8, lns. 36-37; col. 8, lns. 34-35; col. 16, lns. 16-23; col. 9, lns. 3-6.

The accused Google Earth products include "data blocks describing three-dimensional terrain," as claimed in the '189 Patent. Google Earth products utilize data blocks, or a quantity, set or amount of information or data representing a portion of the terrain, as claimed. Google's own website makes clear that Google Earth includes "Imagery and 3D data depicting the entire earth - Terabytes of aerial and satellite imagery depict cities around the world in high-resolution detail." Exh. 16. For example, the accused products "Tilt, Rotate, Visualize Terrain in 3D" as described by Defendants. Exh. 12 ("Using Keyhole" "Compare Keyhole Apps"). Defendants' website further provides that: "With Google Earth, your computer becomes a window to anywhere on the planet, accessing Terabytes of aerial and satellite imagery, elevation data, street-level data, business listings, and more!" Exh. 13 at 11; also see Exh. 17. These "terabytes of data of aerial and satellite imagery" describe the physical features of an area of Earth terrain visualized in three dimensions to portray height and depth, such as data representing images of mountains, canyons, roads and borders, for example. Thus, Google Earth employs data blocks

that describe three-dimensional terrain, as claimed in the '189 Patent.^{11/} Keating Decl., ¶ 11.

Defendants' Google Earth products also contain data blocks belong to a "*hierarchical structure*," *i.e.*, data blocks containing a "plurality of different resolution levels." In the '189 Patent, "hierarchical structure" means data blocks arranged in multiple levels of resolution, wherein each level of the structure contains blocks of a different resolution. *See, e.g., id.*, col. 3, lns. 3-6; col. 8, ln. 15-col. 9, ln. 38; Fig. 2. The data blocks used by the accused Google Earth perform in this same way. For example, the User Manual for the Keyhole 2 product (since renamed and sold as Google Earth), confirms that: "The following images show three different resolutions and the level of detail that you can reasonably expect from them." Exh. 13 at 109, and "The Keyhole client seamlessly combines data with different resolutions to provide users the smooth experience of zooming in and out." *Id.* Defendants' statements in their own product literature confirms that Google Earth provides a method of providing data blocks describing three-dimensional terrain to a renderer, where the data blocks belong to a hierarchical structure

^{11/} Defendants argue that "terrain" should be defined as "the surface features of an area of land; topology." Exhs. 18 (Keyhole, Inc.'s Objections and Responses to Plaintiff's First Set of Interrogatories) & 15 at 12. Even if Defendants' proposed definition is adopted, Google Earth includes this feature. The data blocks in Google Earth include surface features of an area of land, as well as surface features of other areas, objects and materials. Exh. 10, 22. It is well established that a defendant may not avoid liability for infringement simply because its product performs functions *in addition to* those claimed. *See, e.g., Invitrogen Corp. v. Biocrest Mfg., L.P.*, 327 F.3d 1364, 1368 (Fed. Cir. 2003) ("The transition 'comprising' in a method claim indicates that the claim is open-ended and allows for additional steps."); *Stiftung v. Renishaw PLC*, 945 F.2d 1173, 1178 (Fed. Cir. 1991) ("[i]t is fundamental that one cannot avoid infringement by adding elements if each element recited in the claims is found in the accused device."). Infringement "arises when all of the steps of a claimed method are performed, whether or not the infringer also performs additional steps." *Vivid Technologies, Inc. v. American Science & Eng'g, Inc.*, 200 F.3d 795, 811 (Fed. Cir. 1999); *Smith & Nephew, Inc. v. Ethicon, Inc.*, 276 F.3d 1304, 1311 (Fed. Cir. 2001). Therefore, even if the term "terrain" is limited to "the surface area of land," as Defendants propose, the accused Google Earth products nonetheless infringe Claim 1 of the '189 Patent.

including blocks at several different resolution levels, as required by Claim 1 of the ‘189 Patent.

(ii) *“renderer,” “coordinates in the terrain”
& “indication of a respective resolution level”*

Claim 1 of the ‘189 Patent provides that the data blocks are provided to a “*renderer*.” As used in the ‘189 Patent, a “*renderer*” is software or may include a dedicated hardware processor along with a software package running on a general purpose processor, which assists in the display of the terrain based on the data provided. See, e.g., Exh. 7, col. 13, lns. 11-17.

Defendants’ products clearly provide data blocks describing terrain to a renderer, as claimed in Claim 1. The infringing products allow for the selection of either OpenGL or Direct X 3D graphics rendering software to view the 3D terrain data, and the infringing renderer receives data blocks and generates images. Exh. 10. For example, as stated in Defendants’ product literature: “There are two ways to choose either OpenGL or Direct X as your 3D graphics rendering software. Select Set DirectX as the Default Render.”^{12/} Exh. 13 at 114; Keating Decl., ¶ 15.

To provide the data blocks to the renderer, the Skyline invention requires that the renderer receive one or more coordinates in the terrain along with indication of a respective resolution level. In the ‘189 Patent, “*coordinates in the terrain*” are any of a group of one or more numbers used to determine a position in the terrain, such as x, y (longitude, latitude) and height, and/or resolution level. See, e.g., Exh. 7, col. 16, lns. 28-43, col. 18, lns. 12-31; Keating Decl., ¶ 17. The infringing Google Earth products allow the user to enter an address, an intersection, a local point of interest, or latitude/longitude coordinates, all of which are

^{12/} Defendants contend that a “*renderer*” receives data blocks and generates images. Exh. 15. Defendants’ own characterizations of Google Earth confirm that the accused products include a renderer, even under Defendants’ proposed definition. See, e.g., Exhs. 10 & 15 at 14.

“coordinates in the terrain” used to determine the desired position in the terrain for viewing.^{13/}

Exhs. 13 at 46 (“Find a Location Using Coordinates”) & Exh. 10; see also Keating Decl., ¶ 17.

In the Google Earth products, the desired resolution of the terrain is specified and the downloaded data corresponds to the specified coordinates and resolution. See, e.g., Exh. 10. The Google Earth data blocks are stored at a plurality of different resolution levels to allow a user of the infringing products to zoom in and out. Id. The Google Earth products provide data blocks for several different resolution levels. Exh. 13 at 109. As used in the ‘189 Patent, the phrase “indication of a respective resolution level” means something that indicates, points out, or signifies a respective resolution level. The Google Earth products have an indication of a resolution level that corresponds with the desired terrain coordinates. Exh. 10; Keating Decl., ¶ 17. For example, Google Earth allows a user to: “Enter an address, a cross street intersection, or latitude and longitude coordinates to go directly to a specific destination. The Keyhole client seamlessly combines data with different resolutions to provide users to smooth experience of zooming in and out.” Id. The graphical user interface for entering coordinates in the terrain is illustrated below.

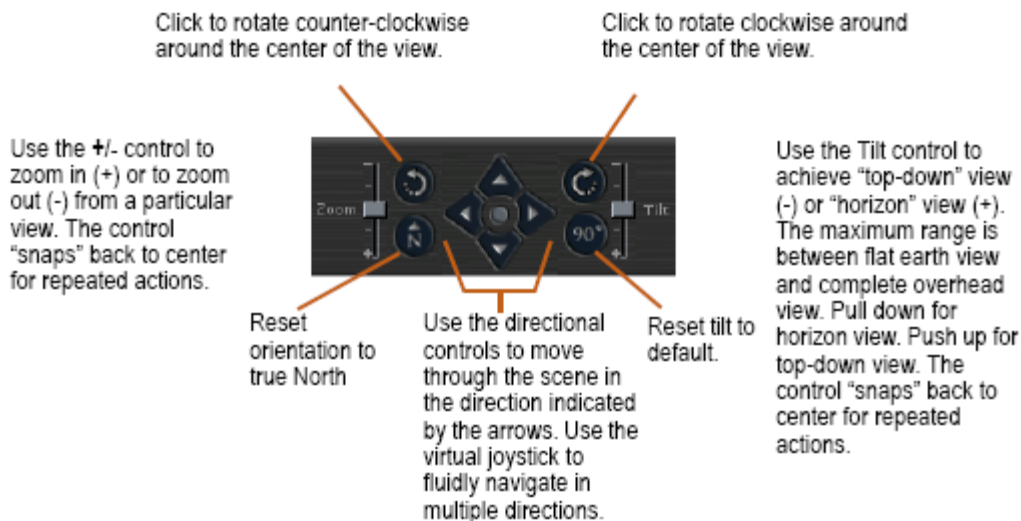


Exh. 13 at 24. Coordinates can be specified in a number of ways, and the Google Earth software determines what data is stored on a local hard drive so that an image at a particular resolution can

^{13/} Defendants attempt to define the phrase “coordinates in the terrain” as “a pair of numerical coordinates, such as latitude and longitude or x and y coordinates, of a particular location in the terrain.” Exh. 15 at 21; Exh. 18. Although it is erroneous to limit the coordinates to a “pair” of coordinate numbers, even if this term were so limited, Google Earth would infringe the claims. Google Earth allows for the entry of a pair of longitude/latitude coordinates to determine a position in the terrain. Exhs. 10 & 21.

be accessed more quickly. Exh. 13 at 28 & 33. For example:

Figure 1: Keyhole Navigation Controls



Exh. 14 at 9. Defendants' own product literature and descriptions confirm that the Google Earth products clearly receive from the renderer one or more coordinates in the terrain along with indication of a respective resolution level. See also Exh. 13 at 79-80; Exh. 14, FIG. 1 at 9.

(iii) ***"first data block," "data corresponding to the one or more coordinates" & "local memory"***

As discussed above, data blocks are provided to the renderer in the infringing Google Earth products. The data blocks are plural, any of which can be "first" data block in a sequence so long as it is followed by a "second" data block. The invention claimed in the '189 Patent does not require that the first data block be the earliest or initial data block to ever be received by the client. Rather, the '189 Patent requires downloading from a remote server one or more additional data blocks at a resolution level higher than the resolution level of the first block, if the provided block from the local memory is not at the requested resolution level. Claim 1 of the '189 Patent further includes providing the renderer with a first data block that includes data corresponding to the one or more coordinates from a local memory. The *"local memory"* according to the '189 Patent is a memory of a local computer. See, e.g., Exh. 7, col. 11, lns. 43-45; 58-61.

The infringing Google Earth products utilize both of these claim elements. The accused products download additional data blocks to increase the resolution of an image when the data block stored locally is not at the desired resolution. Exh. 10. To speed up the process of downloading the data blocks for the user, Google Earth provides a first resolution data block from local memory and then supplements that first data block with data blocks containing higher resolution images retrieved from a server. Google Earth allows the user to zoom in and out of an image, depending on the desired level of detail. Exhs. 10 & 13 at 84 (“Using the Zoom Feature”); Keating Decl., ¶ 18. The image data is stored in a local memory and correspond to coordinates in the terrain. Exhs. 10 & 13 at 22, 36.

For example, the infringing products store data corresponding to terrain that has been previously viewed by a user on the local hard drive so that the client does not have to access the network each time an terrain data is requested. As described by Defendants: “the Streaming status bar indicates when the Keyhole client is actively retrieving information streamed from the Keyhole Server database. The bar indicates the percentage of information retrieved. You can use this information to determine that the download is complete or that there is a problem connecting to the server. Exh. 14 at 7; Keating Decl., ¶ 20. Defendants’ product literature also describes: “This feature determines how much uncompressed data is *stored in the computer’s main memory* (RAM) so that the Keyhole software doesn’t have to retrieve the images from the hard drive. By using stored, or cached data, the viewer can display previously viewed images much faster.” Exh. 14 at 117 (emphasis added). Finally, Defendants further explain:

In a manner similar to memory cache, the disk cache feature determines how much compressed data is *stored on the local hard drive* so that the Keyhole software doesn’t have to go to the network to get the image. The end result is that the images will load more quickly.

Id. at 118 (emphasis added). The “local hard drive,” “main memory” and “memory cache,” as used by Defendants, are all examples of “local memory.” Defendants’ accused products use local memory in the very manner described and claimed in the ‘189 Patent: to store previously viewed images so that those images will not have to be downloaded from the server to enable the user to view requested terrain images much more quickly.

Defendants’ own product literature confirms that the Google Earth products provide the renderer with a first data block which includes data corresponding to the one or more coordinates, from a local memory, as recited in Claim 1 of the ‘189 Patent.^{14/}

(iv) “remote server,” “resolution level” & “communication link”

A client machine running the infringing Google Earth products is connected by communication links and networks, such as the Internet and associated software and hardware, to remote servers operated for or by the Defendants. The remote servers provide additional streamed data and information to the client over the communication links and networks. The data and information includes additional data blocks describing the terrain, at higher resolution levels, if these higher resolution data blocks are not already stored in the local memory of the client computer.

Defendants admit in their product literature that Google Earth streams data at higher resolution levels to the client from a remote server. For example, in stating that “[s]lower connections take longer to sharpen up the image to its highest resolution,” Defendants admit that

^{14/} Defendants argue that the definition of the phrase “data corresponding to the one or more coordinates” should be “data representing the terrain and any additional optional data objects to be overlaid on the terrain that is found at the coordinates received from the renderer.” Exh. 18; see also Exh. 15 at 26. Although this definition clearly introduces limitations into the claim language, even if this definition was adopted by the Court, the Defendants’ products would satisfy this element of the claim. Exhs. 10 & 21; Keating Decl., ¶¶ 18 & 19.

higher resolution data is streamed to the client from the server. Exh. 10; see also Exh. 13 at 110. Defendants' infringing products also use a "Streaming status bar," which "indicates when the Keyhole client is actively retrieving information streamed from the Keyhole Server database. The bar indicates the percentage of information retrieved." Id. at 24. See also id. at 72; Exh. 10; Keating Decl., ¶ 21. This "Streaming status bar" allows the users to observe the status of the process by which the accused products provide higher resolution imagery data to the client machine. Defendants further describe that the "Keyhole tab displays the World Places and High Res Places folders that are automatically streamed when you connect to a Keyhole Server." Exh. 13 at 69. Again, these statements recognize that the Google Earth products stream data at higher resolution levels to the client from a remote server. See also id. at 71-72 & 109.

Therefore, each and every element of Claim 1 of the '189 Patent is included or practiced by the infringing Google Earth products. Skyline is likely to succeed on the merits of its claim that Defendants infringe Claim 1 of the '189 Patent.

(b) Defendants Infringe Claim 12 of the '189 Patent

Claim 12 provides as follows:

12. Apparatus for providing data blocks describing three-dimensional terrain to a render, the data blocks belonging to a hierarchical structure which includes blocks at a plurality of different resolution levels, the apparatus comprising:

a local memory which stores data blocks corresponding to coordinates proximal to a current viewpoint of the renderer;

a communication link, through which the memory receives the data blocks from a remote server;

a processor which receives one or more specified coordinates along with indication of a respective resolution level from a renderer, provides the renderer with the first data block which includes data corresponding to the one or more specified coordinates from a local memory and downloads over the communication link one or more data blocks of resolution level higher than the resolution level of the first data block which include data corresponding to the one or more coordinates if the first block is not from the indicated level.

Exh. 7, col. 18, lns. 12-30.

Claim 12, an apparatus claim, accomplishes the method as described in Claim 1 and therefore contains several similar claim elements as found in Claim 1. As discussed with respect to Claim 1, Defendants' Google Earth products include, for example, "data blocks," a "renderer," a "hierarchical structure," a "plurality of different resolution levels," "local memory," "resolution level," and "first data block." In addition, these products also obviously consist of an "apparatus," or software that is stored in computer readable media (such as servers, clients, networks having media such as hard drives, disks, tapes, memory, etc. for storing computer programs and instructions and data) and run on compatible computers, or that read and execute the instructions in the software. These products also include a "communication link" and a "processor," as specifically required by Claim 12 of the '189 Patent.

Defendants' infringing Google Earth products include a "communication link" or, as used in the '189 Patent, a connection used for transferring data between computers. See, e.g., Exh. 7, FIG. 5. The Google Earth apparatus streams the first and subsequent higher resolution data block to the client over a network, such as the Internet. The data blocks in the infringing products are received from a server via the communication link. A "Streaming status bar" found in the Google Earth software indicates the status of information being actively streamed from a remote server database to the client. Defendants' use of a "communication link" is illustrated by their statement that: "Creating a *Network Link*: To view a KML file on the network without manually copying it over to your local computer, you can create a *network link* to reference the file." Exh. 13 at 64 (emphasis added); see also *id.* at 110; Keating Decl., ¶ 24.

The accused Google Earth products similarly use a "processor," which, as used in the '189 Patent, means hardware and/or software that processes computer-readable instructions. See,

e.g., Exh. 7, FIG. 5 (processor 20); col. 10, lines 61-67; col. 11, lines 39-44.^{15/} Defendants set forth the hardware requirements for a system running their Google Earth software, including “CPU (central processor) Speed Intel® Pentium® PIII 500 MHz or AMD equivalent.” Exh. 13 at 109. Other processors are also used in the accused systems, for example “New graphics cards with 32 MB of memory, which deliver stunning performance with the Keyhole client, are available for less than \$100. See ‘3D Rendering Software’ on page 114 of Keyhole Performance for a list of recommended graphics cards.” *Id.* at 110; Keating Decl., ¶ 25. The Google Earth products clearly include a “processor,” as required by Claim 12 of the ‘189 Patent.

Therefore, as described more fully above with respect to Claim 1 and in the supporting Declaration of Terry Keating, each and every element of Claim 12 of the ‘189 Patent is found in the infringing Google Earth products. Skyline is likely to succeed on the merits of its infringement claim regarding at least Claim 12 of the ‘189 Patent.

(c) The ‘189 Patent Is Valid.

Pursuant to 35 U.S.C. § 282, every claim of an issued patent is presumed valid. This presumption exists at every stage of litigation, including at the preliminary injunction stage. *Canon Computer Sys., Inc. v. Nu-Kote Int’l, Inc.*, 134 F.3d 1085, 1088 (Fed. Cir. 1998). In this case, Defendants bear the heavy burden of establishing by “clear and convincing evidence” that one of the claims of the ‘189 Patent is invalid. *Dana Corp. v. Am. Axle & Mfg., Inc.*, 279 F.3d 1372, 1376 (Fed. Cir. 2002).

To date, Defendants have refused to provide Skyline with any articulated basis for its

^{15/} Defendants argue that the definition of the term “processor” should be construed as “a general purpose processor of the local computer as distinguished from the dedicated hardware processor that runs the ‘renderer’.” Exh. 18. Although this definition clearly introduces limitations into the claim language and is circular in its inclusion of the term “processor” itself, even if this definition was adopted by the Court, the products running the Defendants’ software would inherently satisfy this element of the claim.

assertion that the '189 Patent is allegedly invalid, either prior to or during the litigation. In fact, Defendants have not alleged with any specificity that any single documents constituting alleged prior art contains, within its four corners, each element of the claimed invention. Hameline Decl., ¶ 4. Indeed, Defendants have taken the position that such disclosure is not necessary until after the Court's issuance of the Markman ruling and after fact discovery is complete. Exh. 18 (Defendants' Resp. to Interrogs. No. 11 & 12). Of course, absent such clear and convincing detailed assertions, Google cannot overcome the presumption of validity and it is impossible, and legally not required, for Skyline to refute Defendants unspecified invalidity conclusions.

Prior to this Court's stay of discovery pending the Markman ruling, Defendants did provide a very limited production of allegedly public prior art references to Skyline, which included certain references that had been already been considered and rejected by the United States Patent and Trademark Office ("USPTO") during prosecution of the '189 Patent. As an initial matter, Defendants "retain the burden to show the invalidity of the claims by clear and convincing evidence as to underlying facts." Rockwell Int'l Corp. v. United States, 147 F.3d 1358, 1364 (Fed. Cir. 1998). Because Defendants will apparently attempt to invalidate the '189 Patent based on art previously considered and rejected by the PTO, Defendants' burden in this case is "especially heavy[.]" McGinley v. Franklin Sports, Inc., 262 F.3d 1339, 1353 (Fed. Cir. 2001); see also Glaxo Group Ltd. v. Apotex, Inc., 376 F.3d 1339, (Fed. Cir. 2004) (noting that the "burden is 'especially difficult' when, as is the present case, the infringer attempts to rely on the prior art that was before the patent examiner during prosecution."). Defendants have offered no arguments whatsoever to demonstrate that they will be able to meet their "especially heavy" burden of proving invalidity based on previously considered (and rejected) art.

Second, Defendants have also produced allegedly references that were not "printed publications" and, therefore, are not "prior art" for purposes of 35 U.S.C. §102(b). To constitute

a “printed publication,” a document must be “generally available,” Northern Telecom, Inc. v. Datapoint Corp., 908 F.2d 931, 936 (Fed. Cir. 1990), so that “any one who chooses may avail himself of the information it contains.” Application of Bayer, 568 F.2d 1357, 1360 (C.C.P.A. 1978); see also Freedom Wireless, Inc. v. Boston Communications Group, Inc., 390 F.Supp.2d 63, 89 (D. Mass. 2005) (finding that allegedly invalidating prior art was not a publicly available and, thus, was not a “printed publication” under §102(b)).

In this case, Defendants have asserted (albeit without any specificity) that the ‘189 Patent is anticipated in view of the “Multidimensional Applications and Gigabit Internet Consortium (MAGIC)” project, a consortium of corporations that researched systems for visualizing terrain. Exh. 18. Yet, when Defendants attempted to subpoena MAGIC documents from SRI International (“SRI”), a participant in the MAGIC project, SRI asserted that all such documents were “confidential trade secret and proprietary information or client confidential information that is not discoverable.” Exh. 19. Thus, SRI refused to produce *any* documents to Defendants. In light of these objections, it is clear that the MAGIC references upon which Defendant seek to base an invalidity argument were not in the public domain and cannot be invalidating prior art.

Moreover, even if public, Defendants have also failed to so much as allege that a single MAGIC document constitutes an invalidating anticipatory reference. In response to Skyline’s interrogatories, Defendant have asserted broadly that the MAGIC “*project*” invalidates the ‘189 Patent under 35 U.S.C. § 102. The law requires, however, that a party attacking a patent on the basis of anticipation cite *a single prior art reference containing all of the elements of the patent claim in dispute*. See, e.g., Woodland Trust v. Flowertree Nursery, 148 F.3d 1368, 1371 (Fed. Cir. 1998) (emphasis added). To date, Defendants have cited generally to a *confidential project* - - not to a single prior art reference.

Because every patent is presumed valid, “if [the accused infringer] fails to identify any persuasive evidence of invalidity, the very existence of the patent satisfies [the patentee’s] burden on validity.” Purdue Pharma L.P. v. Boeringer Ingelheim Gmbh, 237 F.3d 1359, 1364 (Fed. Cir. 2001). Skyline has demonstrated a likelihood of success that its ‘189 Patent is valid.

2. Skyline Is Suffering And Will Continue To Suffer Irreparable Harm Absent An Injunction.

In this case, Skyline has shown that it is likely to succeed on the merits of both infringement and validity, then irreparable harm is presumed as a matter of law. Canon Computer, 134 F.3d at 1087 (holding that lower court properly found presumption of irreparable harm in light of showing of likely success on the merits); Smith Int’l Inc. v. Hughes Tool Co., 718 F.2d 1573, 1578 (Fed. Cir. 1983) (where validity and continuing infringement have been clearly established, immediate and irreparable harm will be presumed). “It is well settled that, because the principal value of a patent is its statutory right to exclude, the nature of the patent grant weighs against holding that monetary damages will always suffice to make the patentee whole.” Hybritech, 849 F.2d at 1456-57.

There is no question that Skyline is suffering and will continue to suffer irreparable harm absent an injunction. Defendants’ continued infringement will have market effects that are never fully compensated in money. See, e.g., Atlas Power Co v. Ireco Co., 773 F.2d 1230, 1233 (Fed. Cir. 1985); see also Honeywell Int’l, Inc. v. Universal Avionics Sys. Corp., -- F.Supp.2d --, 2005 WL 2860001, *7 (D. Del. Nov. 1, 2005). Defendants’ unauthorized infringement causes an immediate and permanent erosion of the price the market will bear for 3D visualization systems. Google is a billion dollar behemoth that has taken Skyline’s technology and is using its monetary advantage in an open attempt to destroy Skyline. Defendants have cut the price of the high-end version of the infringing Google Earth product by over 50%, and now gives the low-end

technology away to users for free. Exhs. 1 at 2, 2 at 2 & 6. Indeed, as Keyhole's Chief Executive Officer predicted, Google's acquisition of Keyhole has allowed the accused products to reach "millions of users" by "[c]utting the price" of the infringing technology. Exh. 8 at 3. As a multi-billion dollar company, Defendants can afford to offer the infringing product at extremely low costs, or no cost at all, crippling Skyline's ability to continue to offer its own patented technology. Consumers will no longer be willing to pay for what they can get for free. Skyline's reputation and market position will be permanently damaged if Defendants are not immediately enjoined from selling and/or giving away the Google Earth products. Oakley, Inc. v. Sunglass Hut International, 316 F.3d 1331, 1344 (Fed. Cir. 2003) (presumption of irreparable harm found where defendant was "poised to release 'huge numbers' of the enjoined sunglasses"). As recently noted by one court, "[i]njunctive relief operates to protect the interests of a patentee against future infringements, the market effects of which may not be fully compensable in the form of monetary damages." Honeywell Int'l, Inc., -- F.Supp.2d --, 2005 WL 2860001, *6 (D. Del. Nov. 1, 2005).

The irreparable damage to Skyline is exacerbated by Defendants' substantial investment to get rights to certain imagery datasets at the exclusion of Skyline. Exhs. 1 & 2; Yaron Decl., ¶¶ 7-12. Google Earth has become an authorized reseller in this market of data acquired by DigitalGlobe, a third party vendor of very high resolution global imagery database. Id. The relationship between DigitalGlobe and Defendants is specifically for using the data in a 3D consumer application over the Internet, an application in which Skyline is a primary participant.

"[B]ecause the principle value of a patent is its statutory right to exclude, the nature of the patent grant weighs against holding that monetary damages will always suffice to make the patentee whole." Hybritech, 849 F.2d at 1456-57. The harm to Skyline resulting from

Defendants' conduct goes well beyond that which can be compensated through the award of damages.

3. The Balance Of Hardships Is Clearly In Skyline's Favor.

The hardship on Skyline is substantial. The patented software offered by Skyline is one of its principal products and a substantial source of its revenue. If Defendants are allowed to continue their infringement, even for the life of this case, Skyline's ability to promote its products will be substantially impaired and will lead to an erosion of the value and enforceability of Skyline's patent. Given Defendants' drastic reduction in the price of its infringing products, if allowed to continue, consumers will be unwilling to pay for Skyline's patented technology.

Defendants, on the other hand, will suffer limited, if any harm, if the requested injunction is imposed. Defendant Google is a multi-national, multi-billion dollar corporation. The injunction will not close down Defendants' operation. Rather, it will merely require that Defendants cease offering a single, and for it, relatively new, product line, Google Earth. Defendants should not be permitted to continue to use of the infringing software at Skyline's expense and with the clear intent to put Skyline out of business. Skyline has made a clear showing of likelihood of success and the preliminary injunction should be granted.

4. The Public Has A Strong Interest In Enforcing Patent Rights.

The public has a strong interest in enforcing the rights bestowed upon holders of United States Patents. A preliminary injunction that enforces a valid patent against an infringer "does no more than further public policy inherent in the patent laws designed to encourage useful inventions by rewarding the inventor with a limited period of market exclusivity." Pfizer, Inc. v. Teva Pharmaceuticals USA, Inc., -- F.3d --, 2005 WL 3110828 (Fed. Cir. Nov. 22, 2005) (upholding district court injunction).

Granting injunctive relief protects the value of a patent, and allows the public to garner the attendant benefits. Only if the public harm is so significant as to outweigh the patentee's right to exclude should an injunction be denied.

Honeywell Int'l, Inc., -- F.Supp.2d --, 2005 WL 2860001, *6 (D. Del. Nov. 1, 2005). This strong public policy is fostered by the issuance of a preliminary injunction in this case.

5. No Bond Is Necessary.

There is no need for a bond in this case, as imposition of a preliminary injunction will cause no unnecessary harm to Defendants. Defendants have created an infringing line of product, and it "cannot be heard to complain about a loss of revenue resulting from an injunction prohibiting further infringement." Cybermedia, Inc. v. Symantec Corp., 19 F.Supp.2d 1070, 1080 n.20 (N. D. Cal. 1998). While a preliminary injunction would cut off Defendants' ability to improperly compete and profit from its infringing Google Earth products, it does not prevent Defendants from selling its plethora of otherwise non-infringing products. The proposed injunction is narrowly and reasonably tailored. Accordingly, no bond should be required.

IV. CONCLUSION

Based on the foregoing, Skyline respectfully requests that this Court enter a preliminary injunction barring Defendants' continued infringement of Skyline's patented technology.

Respectfully submitted,

SKYLINE SOFTWARE SYSTEMS, INC.,
By its attorneys,

/s/ H. Joseph Hameline

H. Joseph Hameline, BBO #218710

Mintz, Levin, Cohn, Ferris,

Glovsky & Popeo, P.C.

One Financial Center

Boston, MA 02111

Tel. 617-542-6000

Fax 617-542-2241

hhameline@mintz.com

Dated: January 4, 2006

Certificate of Service

I hereby certify that on January 4, 2006, I caused a true and accurate copy of the foregoing document to be served upon all counsel of record for each party, by complying with this Court's Administrative Procedures for Electronic Case Filing.

/s/ H. Joseph Hameline

H. Joseph Hameline, BBO # 218710

LIT 1555938v.1